

CLAIMS

1. Timepiece, in particular wristwatch comprising a middle (1), a watch movement (4) housed in the middle, a transceiver circuit (5) associated with said movement and an antenna (9; 9A; 9B) connected to said transceiver circuit, 5 characterized in that said antenna (9; 9A; 9B) is formed by a solid electrically conductive monobloc mass (10; 19; 27) having the shape of at least a portion of a ring, this mass being disposed on the periphery of said middle (1), said antenna being connected to the transceiver circuit by way of a conductor (18; 30) passing through the wall of the middle (1) on a portion of its thickness.
- 10 2. Timepiece according to claim 1, characterized in that said conductive solid mass (10; 19; 27) forms a decorative portion thereof.
- 15 3. Timepiece according to either one of claims 1 and 2, characterized in that said conductive solid mass (27) is engaged in a groove (28) made in the lateral surface of the middle (1), its outer surface just touching the lateral surface of the middle.
4. Timepiece according to claim 2, characterized in that said conductive solid mass (10; 19) forms at least a portion of a bezel of the piece surrounding the glass disk of the latter.
- 20 5. Timepiece according to any one of claims 1 to 4, characterized in that said conductive solid mass (10; 19; 27) constitutes a closed ring.
6. Timepiece according to any one of claims 1 to 5, characterized in that said middle (1) being made of electrically conductive material, said conductive solid mass is separated therefrom by an insulator (14, 17; 23, 24; 29).
- 25 7. Timepiece according to claim 1, characterized in that said insulator (14, 17; 23, 24; 29) is made of a material chosen from the group consisting of the nitrile rubbers, hydrogenated nitrile rubbers, polyurethanes, silicones, polymers or ceramics.
- 30 8. Timepiece according to any one of claims 1 to 7, characterized in that said conductive solid mass (10; 19; 27) and, where appropriate, said insulator (14, 17; 23, 24; 29) are fixedly attached to said middle by at least one of the following operations: chasing, screwing, bonding, brazing, crimping and/or riveting.
9. Timepiece according to any one of claims 1 to 8, characterized in that said conductive solid mass (10; 19; 27) is made of a metal such as stainless steel or a gold alloy or made of an agglomerated composite mass, in zirconia for example, charged with conductive particles.
- 35 10. Timepiece according to claim 9, characterized in that said solid conductive mass (10; 19; 27) is coated with a very hard layer (11), made for example of rhodium or diamond.

11. Timepiece according to any one of claims 1 to 10, characterized in that it comprises a conductive element (2) forming a ground plane for said antenna.

12. Timepiece according to claim 11, characterized in that, said middle being metallic, said element forming the ground plane consists of the back (2) of this
5 middle.

13. Timepiece according to claim 11, characterized in that, said middle being of an electrically nonconductive material, said element forming the earth plane consists of a metal disk placed inside the middle against the back of the latter.

14. Timepiece according to any one of the preceding claims, characterized
10 in that said antenna (9; 9A; 9B) is of capacitive type and connected directly to said transceiver circuit (5).